

# VU Research Portal

## Functions and causes: reply to Meijering

Looren De Jong, H.

### ***published in***

Theory and Psychology  
1997

### ***DOI (link to publisher)***

[10.1177/0959354397072003](https://doi.org/10.1177/0959354397072003)

### ***document version***

Publisher's PDF, also known as Version of record

[Link to publication in VU Research Portal](#)

### ***citation for published version (APA)***

Looren De Jong, H. (1997). Functions and causes: reply to Meijering. *Theory and Psychology*, 7, 187-190.  
<https://doi.org/10.1177/0959354397072003>

### **General rights**

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

### **Take down policy**

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

### **E-mail address:**

[vuresearchportal.ub@vu.nl](mailto:vuresearchportal.ub@vu.nl)

# Theory & Psychology

<http://tap.sagepub.com/>

---

## **Functions and Causes : A Reply to Meyering (1997)**

Huib Looren de Jong

*Theory Psychology* 1997 7: 187

DOI: 10.1177/0959354397072003

The online version of this article can be found at:

<http://tap.sagepub.com/content/7/2/187>

---

Published by:



<http://www.sagepublications.com>

**Additional services and information for *Theory & Psychology* can be found at:**

**Email Alerts:** <http://tap.sagepub.com/cgi/alerts>

**Subscriptions:** <http://tap.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

**Citations:** <http://tap.sagepub.com/content/7/2/187.refs.html>

# Functions and Causes

## A Reply to Meyering (1997)

---

**Huib Looren de Jong**

FREE UNIVERSITY, AMSTERDAM

**ABSTRACT.** In this reply, I begin by emphasizing the crucial distinction between 'narrow' and 'wide' functional explanations. Second, I question Meyering's (1997) focus on the metaphysical foundations of functional explanation and the notion of (multiple) supervenience which seems designed to provide such a foundation. More precisely, I doubt both the viability and the necessity of a causal underpinning of wide functional explanation. In my opinion, the notion of cause is as interest-relative as the notion of function, and not necessarily more fundamental. Also, the suggestion that explanations need an independent justification over and above empirical and pragmatic success is disputable.

**KEY WORDS:** causal explanation, ecological psychology, functional explanation, supervenience

Meyering (1997) rightly interprets the main subject of my paper (Looren de Jong, 1997) as a foundational problem for ecological psychology: namely, the notion of function and functional explanation. In my paper, I try to convince the reader of the legitimacy of the notion of function by arguing that it works. Therefore I invoke the ecological tradition, including Marr, to demonstrate its empirical fruitfulness, and to refute Fodor's rejection of relational explanations. Meyering agrees with this objective. In addition, we both reject the notion of narrow (or machine) function prevalent in much of the theorizing about the foundations of cognitive science. This traditional machine functionalism of the Putnam–Fodor variety (meanwhile rejected by Putnam, 1988, but still defended by Fodor, 1994), essentially relies on multiple realization. Where Meyering and I seem to diverge is, first, on my view of Cummins-functions, and, second, on the need for a causal foundation for the notion of function.

As to the first issue, I think Meyering misreads me when he claims that I seek 'to associate [my] relational concept of minds with precisely the Cummins notion of function' (p. 178), and that I suggest that abstract characterization suffices for teleology. On the contrary, I distinguish between levels of analysis with respect to organism–environment relations, and

argue that Cummins (i.e. abstract, system-immanent) functions should be supplemented with an environmental component to make them truly teleofunctional. Teleofunctionalism, in my view, goes beyond machine functionalism, and I have tried (following, among others, Bechtel) to specify where and how it does so.

As to the second issue, Meyering starts his critique by introducing Fodor's focus on the necessarily causal nature of explanation, and the possibly relational nature of expedient but not genuinely explanatory taxonomies. Contrary to what he suggests, this distinction was also explicitly referred to in my paper (I survey the respective notions of individualism and solipsism) and was connected with Fodor's (1991) paper, where the latter dismisses relational taxonomies (in the context of the Putnam–Burge problem) as merely conceptual. Somewhat to my surprise, Meyering seems to grant Fodor the monopoly of causal explanation on scientific legitimacy; he then embarks on the difficult task of underpinning a causal account of relational explanation.

My tactic was, first, to show that the notion of function has been sufficiently sorted out in the philosophy of biology to be a reasonably clear and potentially fruitful explanatory tool and, second, to show, by analysing empirical work by Gibson and Marr, that it works in real theories of perception. Generally speaking, I prefer to see the relationship between empirical science and philosophy as more complex than a unidirectional one of a priori philosophical foundation building. Following Quine (1991) and other naturalists, I think that philosophy should take into account the best theories in science. I doubt whether more is needed, that is, whether the metaphysical justification for teleofunctions, affordances and the relational concept of mind that Meyering demands is really possible, over and above the clarification of these concepts and the assessment of their empirical feasibility. As Quine said, philosophy of science is philosophy enough. Therefore when Meyering writes: 'in the absence of solid foundational and conceptual support, the relational psychology that Looren de Jong envisages remains no more than a gleam in his eye' (p. 177), I wonder whether he really means that empirical psychology, of which I mention ecological psychology (which is quite alive and sometimes kicking), should be sent packing as long as philosophers don't provide it with adequate foundations. If he doesn't, then he owes us some explanation of his view on the role of conceptual foundations in psychology.

Meyering obviously feels that my tactic isn't quite good enough, and he attempts to provide nothing less than a justification for functional explanation. As mentioned, I doubt whether functional explanations that are not causal are necessarily conceptual, and therefore explanatorily uninteresting, as Fodor (1991) argues and Meyering seems to accept, and that the notion of function therefore requires causal underpinning through the notion of multiple supervenience. Therefore, I am wary of Meyering's foundational

ambitions, yet I think his attempt at causal undergirding of function is interesting and worthwhile.

I will restrict myself therefore to a critical remark on a central assumption: the justification of functional explanation through the notions of cause and multiple supervenience. Although Meyering doesn't say so, one suspects that his intuition is that functions are 'cheap' explanations, whereas causality belongs to the physical foundations of the world. In my paper, I compared functional explanation to Dennett's notion of real patterns, as events that are real but not reducible to physics. Meyering apparently wants more, and looks for a way to tie function more firmly to causally efficacious states.

The question I would like to put before Meyering is: does his causal construal provide a foundation for functional explanation beyond the pragmatic considerations I have offered? Does causal grounding provide the desired respectability ('justification') for the concept of function? Note that we are inquiring here about the feasibility of a method, not about metaphysics per se. Causality is a tangled concept, but, as J.S. Mill noted long ago, that which counts as a cause in an explanation (to be distinguished from the metaphysics of causation) is dependent upon context and explanatory interest. Meyering recognizes as much in his extended notion of cause where 'the reality of postulated causes is primarily a function of their scientific utility' (p. 181). He distinguishes this from really existing higher order patterns, since the latter are not necessarily causally efficacious.

Now, apparently there is no principled way of determining what counts as a cause apart from pragmatic explanatory interests. If a cause is, for explanatory purposes, what we deem relevant, why should function not be legitimized ('justified' if you like) for precisely the same reasons? Therefore, I see no great advantage in founding functional explanation on causal explanation: both are pragmatic, are about discovering real patterns, and I see no reason to consider either as more fundamental than the other.

Similar considerations apply to Meyering's interesting notion of multiple supervenience: a physical causal state supports a number of functional states. Here also pragmatic considerations enter the picture: which causal relations must be cited from the supervenience base is a pragmatic question. I submit that one has to have some idea about the function being served before one can cite the relevant causal factors from the supervenience base. Of course, I wholeheartedly agree with Meyering that revealing the 'complex causal interactions constituting the basis for "wide" functional agreement or quasi-intentional relatedness of the organism to its environment' (p. 183) is a valuable explanatory endeavour, and that context should not be conceived as an 'accidental variable in the environment' (p. 183), floating above causal interactions, but as grounded in the latter. However, remember that Meyering's aim is to lay a firm conceptual foundation for function, based on respectable causal explanations. I submit that this he has not yet quite achieved, and some work remains to be done if the notions of cause and

multiple supervenience are to provide such an unshakeable ontological foundation for the notion of teleofunction.

### References

- Dennett, D. (1991). Real patterns. *Journal of Philosophy*, 88, 27–51.
- Fodor, J. (1991). A modal argument for narrow content. *Journal of Philosophy*, 88, 5–26.
- Fodor, J. (1994). *The elm and the expert: Mentalese and its semantics*. Cambridge, MA: MIT Press.
- Looren de Jong, H. (1997). Some remarks on a relational concept of mind. *Theory & Psychology*, 7(2), 147–172.
- Meyering, T.C. (1997) Some problems concerning a relational concept of mind. *Theory & Psychology*, 7(2), 173–186.
- Putnam, H. (1988). *Representation and reality*. Cambridge, MA: MIT Press.
- Quine, W.V.O. (1991). Natural kinds. In R. Boyd, P. Gasper, & J.D. Trout (Eds.), *The philosophy of science* (pp. 159–170). Cambridge, MA: MIT Press.

HUIB LOOREN DE JONG studied experimental psychology and philosophical psychology at the Free University, Amsterdam, and has published on event-related brain potentials, ecological psychology and the philosophy of mind. He presently works in the Section of Theoretical Psychology, Psychology Department, Free University. ADDRESS: Vrije Universiteit, Department of Psychology, De Boelelaan 111, 1081 HV Amsterdam, The Netherlands. [email: [huib@psy.vu.nl](mailto:huib@psy.vu.nl)]